PRACTICAL 8:

Objective: Write a program to create a frame using AWT. Implement mouseClicked(), mouseEntered() and mouseExited() events such that:

- Size of the frame should be tripled when mouse enters it
- Frame should reduce to its original size when mouse is clicked in it
- Close the frame when mouse exits it Code

Code:

```
import java.awt.*;
import java.awt.event.*;
public class PracEight extends Frame implements MouseListener {
    final int length = 100;
    final int breadth = 100;
   PracEight() {
    super("AWT Frame");
    this.setSize(this.length, this.breadth);
    this.setLayout(null);
   this.setVisible(true);
    this.addMouseListener(this);
    this.addWindowListener(new WindowAdapter() {
        public void windowClosing(WindowEvent e) {
            dispose();
    });
 public static void main(String[] args) {
    new PracEight();
 @Override
 public void mouseClicked(MouseEvent e) {
   this.setSize(this.length, this.breadth);
 @Override
 public void mousePressed(MouseEvent e) {
 @Override
 public void mouseReleased(MouseEvent e) {
 @Override
 public void mouseEntered(MouseEvent e) {
   this.setSize(3 * this.length, 3 * this.breadth);
```

```
}
@Override
public void mouseExited(MouseEvent e) {
   this.dispose();
}
```

OUTPUT:



PRACTICAL 9:

Objective: Using AWT, write a program to display a string in frame window with pink color as background.

Code:

```
import java.util.*;
import java.awt.*;
import java.awt.event.*;
public class PracNine extends Frame{
    Label l;
PracNine(){
        super("AWT Pink");
        i = new Label("This is a Label");
```

```
i.setBounds(25,60,250,30);
i.setAlignment(Label.CENTER);
this.add(i);
this.setSize(300,100);
this.setLayout(new FlowLayout());
this.setBackground(Color.pink);
this.setVisible(true);
this.addWindowListener(new WindowAdapter(){
    public void windowClosing(WindowEvent e) {
        dispose();
}
});
}
public static void main(String[] args){
    new PracNine();
}
```

OUTPUT:



PRACTICAL 11:

Objective: Using AWT, write a program using appropriate adapter class to display the message ("Typed character is: X") in the frame window when user types any key.

Code:

```
import java.awt.*;
import java.awt.event.*;
class KbdAdapter extends KeyAdapter {
   Label 1;
   KbdAdapter(Label 1) {
     this.1 = 1;
}
```

```
@Override
    public void keyTyped(KeyEvent e) {
        1.setText("Typed character is: " + e.getKeyChar());
public class Main extends Frame {
    Label 1;
   Main() {
        super("AWT Keyboard");
        1 = new Label("");
        1.setBounds(25, 50, 250, 30);
        1.setAlignment(Label.CENTER);
        this.addKeyListener(new KbdAdapter(1));
        this.add(1);
        this.setSize(300, 110);
        this.setLayout(null);
        this.setVisible(true);
        this.addWindowListener(new WindowAdapter() {
            public void windowClosing(WindowEvent e) {
                dispose();
        });
    public static void main(String[] args) {
        new Main();
```

OUTPUT:

